

**Amendments to the Claims:**

This listing of the claims will replace all prior versions and listing of claims in this application.

**Claims 1-16 (Cancelled)**

17. **(Currently Amended)** A method for ~~preventing or~~ treating brain injury, damage or disease comprising administering an effective amount of a GALR2-specific agonist to an individual in need of such ~~prevention or~~ treatment.
18. **(Currently Amended)** ~~A method according to The method of~~ claim 17, wherein the brain injury or damage is caused by ~~one of~~: embolic, thrombotic or haemorrhagic stroke direct or indirect trauma or surgery to the brain or spinal cord; ischaemic or embolic damage to the brain during cardiopulmonary bypass surgery or renal dialysis; reperfusion brain damage following myocardial infarction; brain disease; immunological damage, chemical damage or radiation damage.
19. **(Currently Amended)** ~~A method according to The method of~~ claim 18, wherein the immunological damage is the result of bacterial or viral infection.
20. **(Currently Amended)** ~~A method according to The method of~~ claim 18, wherein the chemical damage is the result of excess alcohol consumption or administration of chemotherapy agents for cancer treatment.
21. **(Currently Amended)** ~~A method according to The method of~~ claim 18, wherein the radiation damage is the result of radiotherapy.
22. **(Currently Amended)** ~~A method according to The method of~~ claim 17, ~~or 18~~ wherein the brain disease is one of Alzheimer's Disease, Parkinson's Disease, Multiple Sclerosis, or variant Creutzfeld Jacob Disease.

23. (Currently Amended) ~~A method according to any of claims 17-22~~ claim 17, wherein the GALR2-specific agonist is a polypeptide comprising a portion of the galanin amino acid sequence.
24. (Currently Amended) ~~A method according to~~ The method of claim 23, wherein the GALR2-specific agonist is AR-M1896.
25. (Currently Amended) ~~A method according to any of claims 17-22~~ claim 17, wherein the GALR2-specific agonist is a non-peptide small chemical entity.
26. (Currently Amended) ~~A method according to any of claims 17-25~~ claim 17, wherein the GALR2-specific agonist has a binding affinity for GALR2 of between 0 and 100  $\mu$ M and greater than 30-fold binding specificity for GALR2 over GALR1.
27. (Currently Amended) ~~A method according to any of claims 17-26~~ claim 17, wherein the GALR2-specific agonist has a binding affinity for GALR2 of between 0 and 100  $\mu$ M and greater than 50-fold binding specificity for GALR2 over GALR1.
28. (Currently Amended) ~~A method according to any of claims 17-27~~ claim 17, wherein the GALR2-specific agonist has a binding affinity for GALR2 of between 0 and 100  $\mu$ M and greater than 100-fold binding specificity for GALR2 over GALR1.
29. (Currently Amended) ~~A method according to any of claims 26-28~~ claim 26, wherein the GALR2-specific agonist has greater than 30-fold binding specificity for GALR2 over GALR3.
30. (Currently Amended) ~~A method according to any of claims 26-29~~ claim 26, wherein the GALR2-specific agonist has greater than 50-fold binding specificity for GALR2 over GALR3.

31. (Currently Amended) ~~A method according to any of claims 26-30~~ claim 26, wherein the GALR2-specific agonist has greater than 100-fold binding specificity for GALR2 over GALR3.
32. (Currently Amended) ~~A method according to any of claims 26-31~~ claim 26, wherein the GALR2-specific agonist has a binding affinity for GALR2 of between 0 and 1  $\mu$ M.
33. (Currently Amended) A method of selecting a candidate brain injury, damage or repair prevention or treatment compound, comprising determining whether at least one test compound is a GALR2-specific agonist and selecting the at least one test compound as a candidate compound if it is a GALR2-specific agonist.
34. (Currently Amended) ~~A method according to~~ The method of claim 33, wherein it is determined that the at least one test compound binds to GALR2 with a binding affinity of between 0 and 100  $\mu$ M and with a specificity of greater than 30-fold for GALR2 over GALR1.
35. (Currently Amended) ~~A method according to claim 33 or 34~~ The method of claim 33, wherein it is determined that at least one test compound binds to GALR2 with a binding affinity between 0 and 100  $\mu$ M and with a specificity of greater than 50 fold for GALR2 over GALR1.
36. (Currently Amended) ~~A method according to claim 33, 34 or 35~~ The method of claim 33, wherein it is determined that at least one test compound binds to GALR2 with a binding affinity between 0 and 100  $\mu$ M and with a specificity of greater than 100 fold for GALR2 over GALR1.
37. (Currently Amended) ~~A method according to any of claims 34-36~~ The method of claim 34, wherein it is determined that at least one test compound binds to GALR2 with a specificity of greater than 30 fold for GALR2 over GALR3.

38. (Currently Amended) ~~A method according to any of claims 34-37~~ The method of claim 34, wherein it is determined that at least one test compound binds to GALR2 with a specificity of greater than 50 fold for GALR2 over GALR3.

39. (Currently Amended) ~~A method according to any of claims 34-38~~ The method of claim 34, wherein it is determined that at least one test compound binds to GALR2 with a specificity of greater than 100 fold for GALR2 over GALR3.

40. (Currently Amended) ~~A method according to any of claims 34-39~~ The method of claim 34, wherein it is determined that the at least one test compound binds to GALR2 with a binding affinity of between 0 and 1  $\mu$ M.

41. (Currently Amended) ~~A method according to any of claims 33-40~~ The method of claim 33, wherein the GALR2 comprises at least a portion of human GALR2.

42. (Currently Amended) ~~A method according to~~ The method of claim 41, wherein the GALR2 is full-length human GALR2.

43. (Currently Amended) ~~A method according to any of claims 33-40~~ The method of claim 33, wherein the GALR2 comprises at least a portion of non-human GALR2.

44. (Currently Amended) ~~A method according to~~ The method of claim 43, wherein the GALR2 is rat or mouse GALR2.

45. (Currently Amended) ~~A method according to claim 43 or 44~~ The method of claim 43, wherein the GALR2 is full-length GALR2.

46. (Currently Amended) ~~A method according to any of claims 33-40~~ The method of claim 33, wherein the GALR2 is a chimeric receptor construct.

47. (Currently Amended) A method according to any of claims 33-46 The method of claim 33, wherein a selection of test compounds are screened in a high throughput screening assay.

48. (Currently Amended) A pharmaceutical composition ~~for use in the prevention or treatment of brain injury, damage or disease, the composition~~ comprising:

- an effective amount of at least one GALR2-specific agonist, or pharmaceutically acceptable salts thereof; and
- a pharmaceutically suitable adjuvant, carrier or vehicle.

Claims 49-53 (Cancelled)

54. (Currently Amended) A pharmaceutical composition according to any of claims 48-53 The pharmaceutical composition of claim 48, wherein the GALR2- specific agonist is a polypeptide comprising a portion of the galanin amino acid sequence.

55. (Currently Amended) A pharmaceutical composition according to The method of claim 54, wherein the GALR2-specific agonist is AR-M1896.

56. (Currently Amended) A pharmaceutical composition according to any of claims 48-53 The method of claim 48, wherein the GALR2- specific agonist is a non-peptide small chemical entity.

57. (Currently Amended) A pharmaceutical composition according to any of claims 48-56 The method of claim 48, wherein the GALR2- specific agonist has a binding affinity for GALR2 of between 1 and 100  $\mu$ M and greater than 30 fold binding specificity for GALR2 over GALR1.

58. (Currently Amended) A pharmaceutical composition according to any of claims 48-57 The method of claim 48, wherein the GALR2- specific agonist has a binding affinity for GALR2 of between 0 and 100  $\mu$ M and greater than 50 fold binding specificity for GALR2 over GALR1.

59. (Currently Amended) A pharmaceutical composition according to any of claims 48-58 The method of claim 48, wherein the GALR2- specific agonist has a binding affinity for GALR2 of between 1 and 100  $\mu$ M and greater than 100 fold binding specificity for GALR2 over GALR1.

60. (Currently Amended) A pharmaceutical composition according to any of claims 57-59 The method of claim 57, wherein the GALR2- specific agonist has greater than 30-fold binding specificity for GALR2 over GALR3.

61. (Currently Amended) A pharmaceutical composition according to any of claims 57-60 The method of claim 57, wherein the GALR2- specific agonist has greater than 50-fold binding specificity for GALR2 over GALR3.

62. (Currently Amended) A pharmaceutical composition according to any of claims 57-61 The method of claim 57, wherein the GALR2- specific agonist has greater than 100-fold binding specificity for GALR2 over GALR3.

63. (Currently Amended) A pharmaceutical composition according to any of claims 57-62 The method of claim 57, wherein the specific- GALR2 agonist has a binding affinity for GALR2 of between 0 and 1  $\mu$ M.

Claims 64-95 (Cancelled)

96. A method of inhibiting the death of a cell comprising contacting the cell with an amount of a GALR2-specific agonist effective to inhibit the death of the cell.

97. (Currently Amended) A method according to The method of claim 96, wherein the cell is a neuron.

98. **(Currently Amended)** ~~A method according to claim 96 or 97~~ The method of claim 96,  
wherein the cell is a neuron from the central nervous system.

99. **(Currently Amended)** ~~A method according to claim 96, 97 or 98~~ The method of claim 96,  
wherein the cell is a hippocampal or cortical neuron.

100. **(Currently Amended)** ~~A method according to any of claims 96 to 99~~ The method of claim  
96, wherein the cell is a human cell.